

1. (Third amended) In a data access network system that includes a content server coupled to a plurality of proxy servers via an interconnect network, a system of maintaining content consistency between the content server and proxy servers, comprising:

a subscription manager in the content server for specifying all of the proxy servers that are subscribed to a content file stored in the content server; and

a consistency manager also in the content server for notifying all of so subscribed proxy servers that cache the content file when the content file is updated in the content server to discard the cached content file from those proxy servers.

- 2. The system of claim 1, wherein the subscription manager generates a subscription list that specifies all of the subscribed proxy servers that cache the content file when the subscription manager is notified by each of the proxy servers that it has cached the content file.
- 3. The system of claim 2, wherein a proxy server notifies the subscription manager that it has cached the content file via an HTTP GET request with a SUB (Subscription) header when the proxy server decides that the content file should be subscribed.
- 4. The system of claim 3, wherein if the proxy server decides that the content file is not a popular file, then that proxy server does not notify the subscription manager that it has cached the content file.
- 5. The system of claim 1, wherein the consistency manager notifies each of the subscribed proxy servers via a DWS INV message when a content file has changed.



6. (First amended) The system of claim 1, wherein the consistency manager also sends an updated content file to each of the proxy servers via an HTTP PUT request with a DWS SUB header.

7. The system of claim 1, wherein the consistency manager notifies all of the proxy servers specified by the subscription manager to discard the cached content file from the proxy servers when the content file is updated or deleted in the content server within a predetermined time interval.